

**CRF Errors Edited by the STIC Systems  
Branch**

Serial Number: 10766, 528

CRF Edit Date: 8/25/04  
Edited by: KE

Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

Corrected the SEQ ID NO. Sequence numbers edited were:

**ENTERED**

Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

Deleted: ☒ invalid beginning/end-of-file text ; ☐ page numbers

Inserted mandatory headings/numeric identifiers, specifically:

Moved responses to same line as heading/numeric identifier, specifically:

Other:



IFWO

## RAW SEQUENCE LISTING

DATE: 08/25/2004

PATENT APPLICATION: US/10/766,528

TIME: 10:50:24

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\08252004\J766528.raw

3 &lt;110&gt; APPLICANT: Salzwedel, Karl

4 Li, Feng

5 Wild, Carl T.

6 Allaway, Graham P.

7 Freed, Eric O.

9 &lt;120&gt; TITLE OF INVENTION: Inhibition Of Hiv-1 Replication By Disruption Of The

Processing

10 Of The Viral Gag Capsid (Ca) Protein From The Ca-Spacer Peptide 1

11 Protein Precursor

13 &lt;130&gt; FILE REFERENCE: 1900.0430002

15 &lt;140&gt; CURRENT APPLICATION NUMBER: 10/766,528

16 &lt;141&gt; CURRENT FILING DATE: 2004-01-29

18 &lt;150&gt; PRIOR APPLICATION NUMBER: 60/443,180

19 &lt;151&gt; PRIOR FILING DATE: 2003-01-29

21 &lt;150&gt; PRIOR APPLICATION NUMBER: 60/496,660

22 &lt;151&gt; PRIOR FILING DATE: 2003-08-21

24 &lt;160&gt; NUMBER OF SEQ ID NOS: 11

26 &lt;170&gt; SOFTWARE: PatentIn version 3.2

29 &lt;210&gt; SEQ ID NO: 1

30 &lt;211&gt; LENGTH: 10

31 &lt;212&gt; TYPE: PRT

32 &lt;213&gt; ORGANISM: HIV-1

35 &lt;220&gt; FEATURE:

36 &lt;221&gt; NAME/KEY: MISC FEATURE

37 &lt;222&gt; LOCATION: (4)..(4)

38 &lt;223&gt; OTHER INFORMATION: Xaa can be either Val or Ile

41 &lt;400&gt; SEQUENCE: 1

W--&gt; 43 Lys Ala Arg Xaa Leu Ala Glu Ala Met Ser

44 1 5 10

47 &lt;210&gt; SEQ ID NO: 2

48 &lt;211&gt; LENGTH: 10

49 &lt;212&gt; TYPE: PRT

50 &lt;213&gt; ORGANISM: HIV-1

52 &lt;400&gt; SEQUENCE: 2

54 Lys Ala Arg Val Leu Val Glu Ala Met Ser

55 1 5 10

58 &lt;210&gt; SEQ ID NO: 3

59 &lt;211&gt; LENGTH: 10

60 &lt;212&gt; TYPE: PRT

61 &lt;213&gt; ORGANISM: HIV-1

63 &lt;400&gt; SEQUENCE: 3

65 Lys Ala Arg Ile Leu Ala Glu Val Met Ser

66 1 5 10

69 &lt;210&gt; SEQ ID NO: 4

## RAW SEQUENCE LISTING

DATE: 08/25/2004

PATENT APPLICATION: US/10/766,528

TIME: 10:50:24

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\08252004\J766528.raw

70 &lt;211&gt; LENGTH: 1823

71 &lt;212&gt; TYPE: DNA

72 &lt;213&gt; ORGANISM: NL4-3

75 &lt;220&gt; FEATURE:

76 &lt;221&gt; NAME/KEY: misc\_feature

77 &lt;222&gt; LOCATION: (1365)..(1365)

78 &lt;223&gt; OTHER INFORMATION: n is a, c, g, or t

80 &lt;400&gt; SEQUENCE: 4

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85 ctagaacgat tcgcagttaa tcctggcctt ttagagacat cagaaggctg tagacaaata      180
87 ctgggacagc tacaaccatc ccttcagaca ggatcagaag aacttagatc attatataat      240
89 acaatagcag tcctctattg tgtgcatcaa aggatagatg taaaagacac caaggaagcc      300
91 ttagataaga tagaggaaga gcaaaacaaa agtaagaaaa aggcacagca agcagcagct      360
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97 gagaaggctt tcagcccaga agtaataccc atgttttcag cattatcaga aggagccacc      540
99 ccacaagatt taaataccat gctaaacaca gtggggggac atcaagcagc catgcaaatg      600
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111 tataaaaactc taagagccga gcaagcttca caagaggtaa aaaattggat gacagaaacc      960
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129 aaggaactgt atccttttagc ttccctcaga tcaactcttg gcagcgaccc ctcgtcacaa      1500
131 taaagatagg ggggcaatta aaggaagctc tattagatac aggagcagat gatacagtat      1560
133 tagaagaaat gaatttgcca ggaagatgga aacccaaaat gataggggga attggagggt      1620
135 ttatcaaagt aagacagtat gatcagatac tcatagaaat ctgcggacat aaagctatag      1680
137 gtacagtatt agtaggacct acacctgtca acataattgg aagaaatctg ttgactcaga      1740
139 ttggctgcac tttaaatttt cccattagtc ctattgagac tgtaccagta aaattaaagc      1800
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147 <213> ORGANISM: NL4-3
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154 ctagaacgat tcgcagttaa tcctggcctt ttagagacat cagaaggctg tagacaaata      180
156 ctgggacagc tacaaccatc ccttcagaca ggatcagaag aacttagatc attatataat      240
158 acaatagcag tcctctattg tgtgcatcaa aggatagatg taaaagacac caaggaagcc      300

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## RAW SEQUENCE LISTING

DATE: 08/25/2004

PATENT APPLICATION: US/10/766,528

TIME: 10:50:24

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\08252004\J766528.raw

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162 gacacaggaa acaacagcca ggtcagccaa aattacccta tagtgcagaa cctccagggg 420
164 caaatggtac atcaggccat atcacctaga actttaaatg catgggtaaa agtagtagaa 480
166 gagaaggctt tcagcccaga agtaataccc atgttttcag cattatcaga aggagccacc 540
168 ccacaagatt taaataccat gctaaacaca gtgggggggac atcaagcagc catgcaaagtg 600
170 ttaaaagaga ccatcaatga ggaagctgca gaatgggata gattgcatcc agtgcaagca 660
172 gggcctattg caccaggcca gatgagagaa ccaaggggaa gtgacatagc aggaactact 720
174 agtacccttc aggaacaaat aggatggatg acacataatc cacctatccc agtaggagaa 780
176 atctataaaa gatggataat cctgggatta aataaaatag taagaatgta tagccctacc 840
178 agcattcttg acataagaca aggaccaaaag gaacccttta gagactatgt agaccgattc 900
180 tataaaactc taagagccga gcaagcttca caagaggtaa aaaattggat gacagaaacc 960
182 ttgttgggtc aaaatgcgaa cccagattgt aagactatgt taaaagcatt gggaccagga 1020
184 gcgacactag aagaaatgat gacagcatgt caggaggtgg ggggaccggg ccataaagca 1080
186 agagttttgg ctgaagcaat gagccaagta acaaaccag ctaccataat gatacagaaa 1140
188 ggcaatttta ggaaccaaag aaagactgtt aagtgtttca attgtggcaa agaagggcac 1200
190 atagccaaaa attgcagggc ccctaggaaa aagggtgtt ggaaatgtgg aaaggaagga 1260
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194 cacaagggaa ggccagggaa ttttcttcag agcagaccag agccaacagc cccaccagaa 1380
196 gagagcttca ggtttgggga agagacaaca actccctctc agaagcagga gccgatagac 1440
198 aaggaactgt atccttttagc ttccctcaga tcaactcttg gcagcgaccc ctgcgcacaa 1500
200 taaagatagg ggggcaatta aaggaagctc tattagatagc aggagcagat gatacagtat 1560
202 tagaagaaat gaatttgcca ggaagatgga aacaaaaaat gataggggga attggaggtt 1620
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206 gtacagtatt agtaggacct acacctgtca acataattgg aagaaatctg ttgactcaga 1740
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210 caggaatgga tggcccaaag 1820
213 <210> SEQ ID NO: 6
214 <211> LENGTH: 1982
215 <212> TYPE: DNA
216 <213> ORGANISM: HIV-1RF
219 <220> FEATURE:
220 <221> NAME/KEY: misc_feature
221 <222> LOCATION: (1961)..(1961)
222 <223> OTHER INFORMATION: n i a a, c, g, or t
224 <400> SEQUENCE: 6
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227 ttaaggccag ggggaaagaa aagatataag ttaaaacata taatatgggc aagcaggag 120
229 ctagaacgat ttgctgtcaa tcctggcctt ttagagacag cagagggctg tagacaaata 180
231 ctgggacagc tacaaccagc ccttcagaca ggatcagaag aacttaaatac attatataat 240
233 gcagtagcaa ccctctattg tgtacatcaa aatatagagg taagagacac caaggaagct 300
235 ttagacaaga tagaggaaga gcaaaacaaa agtaagaaaa aagcacagca agcagcagct 360
237 gacacaggaa acggcagcca ggtcagccaa aattacccta tagtgcagaa ccttcagggg 420
239 caaatggtac atcaagccat atcacctaga actttaaatg catgggtaaa agtagtagaa 480
241 gagaaggctt ttagcccaga agtaataccc atgttttcag cattatcaga aggagccacc 540
243 ccacaagatt taaacaccat gctaaacaca gtgggggggac atcaagcagc catgcaaagtg 600
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247 gggcctattg caccaggcca gatgagagaa ccaaggggaa gtgacatagc aggaaccact 720
249 agtacccttc aggaacaaat aggatggatg acaaataatc cacctatccc agtaggagaa 780
251 atctataaaa ggtggataat tctgggatta aataaaatag taagaatgta tagcccccac 840

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## RAW SEQUENCE LISTING

DATE: 08/25/2004

PATENT APPLICATION: US/10/766,528

TIME: 10:50:24

Input Set : A:\pto.kd.txt

Output Set : N:\CRF4\08252004\J766528.raw

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255 tataaaactc taagagccga gcaagcttca caggatgtaa aaaattggat gacagaaacc 960
257 ttgctggtcc aaaatgcgaa cccagattgt aaaactatgt taaaagcatt gggaccagca 1020
259 gctacactag aagaaatgat gacagcatgt caggagtag ggggaccag ccataaagca 1080
261 agaatttttg ctgaagtaat gagccaagta acaaattcag ctaccataat gctgcagaaa 1140
263 ggtaatttta gggaccaaag aaaaattgtt aagtgtttca actgtggcaa agtagggcac 1200
265 atagccaaaa attgcagggc ccctaggaaa aagggtgtt ggaaatgtgg aaaggaagga 1260
267 caccaaatga aagattgcac tactgaggga cgacaggcta attttttagg gaaaatctgg 1320
269 ccttcccaca agggaaggcc agggaacttt cttcagagca gaccagagcc aacagcccca 1380
271 ccagaagaga gcttcagggtt tggggaagag acaactccct ctcagaagca ggagaagata 1440
273 gacaaggaac tgtatccttt agcttccctc aaatcactct ttggcaacga cccatcgtca 1500
275 cagtaaagat aggggggcaa ttaaaggaag ctctattaga tacaggagca gatgatacag 1560
277 tattagaaga aatgaatttg ccaggaaaat ggaaaccaa aatgatagg ggaattggag 1620
279 gttttatcaa agtaaggcag tatgatcaa tactcataga aatctgtgga cataaagcta 1680
281 taggtacagt attagtagga cctacacctg tcaacataat tggaagaaat ctgttgactc 1740
283 agattggttg cactttaaat tttccatta gtcctattga aactatacca gtaaaattaa 1800
285 agccaggaat ggatggccca aaagttaaac aatggccatt gacagaggaa aaaataaaag 1860
287 cattgataga aatttgtaca gaaatggaaa aggaaggaaa aatttcaaaa attgggcctg 1920
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296 <212> TYPE: DNA
297 <213> ORGANISM: HIV-1RF
299 <400> SEQUENCE: 7
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304 ctagaacgat ttgctgtcaa tcttggcctt ttagagacag cagagggtg tagacaaata 180
306 ctgggacagc tacaaccagc ccttcagaca ggatcagaag aacttaaattc attatataat 240
308 gcagtagcaa cctctatttg tgtacatcaa aatatagagg taagagacac caaggaaagct 300
310 ttagacaaga tagaggaaga gcaaaacaaa agtaagaaaa aagcacagca agcagcagct 360
312 gacacaggaa acggcagcca ggtcagccaa aattacccta tagtgagaa ccttcagggg 420
314 caaatggtac atcaagccat atcacctaga actttaaatg catgggtaaa agtagtagaa 480
316 gagaaggctt ttagcccaga agtaataccc atgttttcag cattatcaga aggagccacc 540
318 ccacaagatt taaacaccat gctaaacaca gtggggggac atcaagcagc catgcaaatg 600
320 ttaaaagaga ctatcaatga ggaagctgca gaatgggata gattgcatcc agtgcaagca 660
322 gggcctattg caccaggcca gatgagagaa ccaaggggaa gtgacatagc aggaaccact 720
324 agtacccttc aggaacaaat aggatggatg acaaataatc cacctatccc agtaggagaa 780
326 atctataaaa ggtggataat tctgggatta aataaaatag taagaatgta tagcccatc 840
328 agcattctgg acataagaca aggacctaag gaacccttta gagactatgt agaccggttc 900
330 tataaaactc taagagccga gcaagcttca caggatgtaa aaaattggat gacagaaacc 960
332 ttgctggtcc aaaatgcgaa cccagattgt aaaactatgt taaaagcatt gggaccagca 1020
334 gctacactag aagaaatgat gacagcatgt caggagtag ggggaccag ccataaagca 1080
336 agaatttttg ctgaagcaat gagccaagta acaaattcag ctaccataat gctgcagaaa 1140
338 ggtaatttta gggaccaaag aaaaattgtt aagtgtttca actgtggcaa agtagggcac 1200
340 atagccaaaa attgcagggc ccctaggaaa aagggtgtt ggaaatgtgg aaaggaagga 1260
342 caccaaatga aagattgcac tactgaggga cgacaggcta attttttagg gaaaatctgg 1320
344 ccttcccaca agggaaggcc agggaacttt cttcagagca gaccagagcc aacagcccca 1380
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## RAW SEQUENCE LISTING

DATE: 08/25/2004

PATENT APPLICATION: US/10/766,528

TIME: 10:50:24

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\08252004\J766528.raw

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352 tattagaaga aatgaatttg ccaggaaaat ggaaaccaa aatgataggg ggaattggag 1620
354 gttttatcaa agtaaggcag tatgatcaaa tactcataga aatctgtgga cataaagcta 1680
356 taggtacagt attagtagga cctacacctg tcaacataat tggaagaaat ctgttgactc 1740
358 agattggttg cactttaaat tttcccatta gtcctattga aactatacca gtaaaattaa 1800
360 agccaggaat ggatggccca aaagttaaac aatggccatt gacagaggaa aaaataaaag 1860
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367 <212> TYPE: DNA
368 <213> ORGANISM: HIV-1
370 <400> SEQUENCE: 8
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374 <210> SEQ ID NO: 9
375 <211> LENGTH: 30
376 <212> TYPE: DNA
377 <213> ORGANISM: HIV-1
379 <400> SEQUENCE: 9
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383 <210> SEQ ID NO: 10
384 <211> LENGTH: 30
385 <212> TYPE: DNA
386 <213> ORGANISM: HIV-1
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390 <221> NAME/KEY: misc_feature
391 <222> LOCATION: (10)..(10)
392 <223> OTHER INFORMATION: n is either g or a
394 <400> SEQUENCE: 10
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398 <210> SEQ ID NO: 11
399 <211> LENGTH: 10
400 <212> TYPE: PRT
401 <213> ORGANISM: SIV mac239
403 <400> SEQUENCE: 11
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406 1 5 10

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RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/766,528

DATE: 08/25/2004  
TIME: 10:50:25

Input Set : A:\pto.kd.txt  
Output Set: N:\CRF4\08252004\J766528.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 4 ✓  
Seq#:4; N Pos. 1365 ✓  
Seq#:6; N Pos. 1961 ✓  
Seq#:10; N Pos. 10 ✓

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/766,528

DATE: 08/25/2004

TIME: 10:50:25

Input Set : A:\pto.kd.txt

Output Set: N:\CRF4\08252004\J766528.raw

L:43 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1320  
L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1920  
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0





IFWO

## RAW SEQUENCE LISTING

DATE: 08/23/2004

PATENT APPLICATION: US/10/766,528

TIME: 15:51:59

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\08232004\J766528.raw

3 <110> APPLICANT: Salzwedel, Karl  
 4 Li, Feng  
 5 Wild, Carl T.  
 6 Allaway, Graham P.  
 7 Freed, Eric O.  
 9 <120> TITLE OF INVENTION: Inhibition Of Hiv-1 Replication By Disruption Of The  
 Processing  
 10 Of The Viral Gag Capsid (Ca) Protein From The Ca-Spacer Peptide 1  
 11 Protein Precursor  
 13 <130> FILE REFERENCE: 1900.0430002  
 15 <140> CURRENT APPLICATION NUMBER: 10/766,528  
 16 <141> CURRENT FILING DATE: 2004-01-29  
 18 <150> PRIOR APPLICATION NUMBER: 60/443,180  
 19 <151> PRIOR FILING DATE: 2003-01-29  
 21 <150> PRIOR APPLICATION NUMBER: 60/496,660  
 22 <151> PRIOR FILING DATE: 2003-08-21  
 24 <160> NUMBER OF SEQ ID NOS: 11  
 26 <170> SOFTWARE: PatentIn version 3.2

Does Not Comply  
 Corrected Diskette Needed

(pg. 1-2)

## ERRORED SEQUENCES

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 399 <211> LENGTH: 10  
 400 <212> TYPE: PRT  
 401 <213> ORGANISM: SIV mac239  
 403 <400> SEQUENCE: 11  
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 E--> 411 1

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## VERIFICATION SUMMARY

DATE: 08/23/2004

PATENT APPLICATION: US/10/766,528

TIME: 15:52:00

Input Set : A:\PTO.FG.txt

Output Set: N:\CRF4\08232004\J766528.raw

L:43 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0  
L:125 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1320  
L:289 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:1920  
L:395 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:10 after pos.:0  
L:409 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:11 ✓  
M:332 Repeated in SeqNo=11